

MIAMI-DADE COUNTY, FLORIDA METRO-DADE FLAGLER BUILDING 140 WEST FLAGLER STREET, SUITE 1603 MIAMI, FLORIDA 33130-1563 (305) 375-2901 FAX (305) 375-2908 www.buildingcodeonline.com

NOTICE OF ACCEPTANCE (NOA)

Master Security Doors Inc, 702 South Military Trail Deerfield Beach, Fla. 33442

Scope:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series EX3 Inswing Steel Door

APPROVAL DOCUMENT: Drawing No. **05-371**, titled "EX3 USA Inswing Door Large Missile Impact Resistant", sheets 1 through 11 of 11, dated 11/10/05, prepared by Tilteco Inc. Tillit Testing & Engineering Company, signed and sealed by Walter A, Tillit, P.E., bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. This NOA consists of this page 1 and evidences E-1 as well as approval document mentioned above.

The submitted documentation was reviewed by Herminio F. Gonzalez, P.E. Director of B.C.C.O.

MX 2006

NOA No 05-1121.04 Expiration Date: February 23,2011 Approval Date: February 23,2006

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Master Security Doors, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

- 1. Manufacturer's die drawings and sections.
- 2. Drawing No. **05-371**, titled "EX3 USA Inswing Door Large Missile Impact Resistant", sheets 1 through 11 of 11, dated 11/10/05, prepared by Tilteco Inc. Tillit Testing & Engineering Company, signed and sealed by Walter A. Tillit, P.E.

B. TESTS

- 1. Test reports on 1) Air Infiltration Test, per TAS- 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Forced Entry Resistant test per FBC 2411.3.2.1 (b) 202-94

Along with marked-up drawings and installation diagram of inswing steel door, prepared by American Test Lab of South Florida, Test Report No. ATL# 0708.01-05, dated 11/09/05, signed and sealed by William R. Mehner, P.E.

C. CALCULATIONS

1. Anchor Calculation and Structural analysis, prepared by Tilteco, Inc., dated 09/09/05, signed and sealed by Walter A. Tillit Jr., P.E.

D. QUALITY ASSURANCE

1. Miami Dade Building Code Compliance Office (BCCO).

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. 02-0503.07 issued to Elco Testron, Inc. for "Tapcon Concrete Anchors" dated 09/05/02, expiring on 01/08/06.

F. STATEMENTS

1. Statement letter dated October 11, 2005, "No financial interest" and conformance, signed and sealed by Walter A. Tillit, P.E.

G. OTHER

1. Letter from the consultant, dated January 20, 2006, stating that the product is in compliance with the Florida Building Code (FBC).

Herminio F. Gonzalez, P.E. Product Control Examiner

NOA No 05-1121.04

Expiration Date: February 23,2011 Approval Date: February 23,2006

GENERAL NOTES

1. EX-3 USA, Inswing single door, large missile impact resistant shown on this Product Approval Document (P.A.D.) has been verified for compliance in accordance with the 2004 edition of the Florida Building Code.

Door may be installed at High Velocity Hurricane Zones. Design wind loads shall be determined as per section 1620 of the above mentioned code. In order to verify that anchors on this P.A.D., as tested, were not overstressed, a 33% increase in allowable stresses for wind loads was not used in their analysis. A duration factor CD = 1.60 was used to verify fasteners in

This door's adequacy for impact and cyclic resistance has been verified in accordance with section 1609.1.4 of the above mentioned code, as per TAS 201, 202 and 203 protocols, per ATL Report #0708.01-05, and as per submitted calculations performed as per section 1612 of the Florida Building Code.

2. Max Design Pressure Rating: +70, -200 psf

This pressure rating is only valid if door is assembled with required hardware indicated on sheet 2 of this drawing.

3. This Door is approved for Air and Water Infiltration.

This approval is only valid if door is sealed with required gasketing and weather stripping as indicated on Bill of Materials on sheet 3, and sealant specified on General Note 10 below.

4. This Door will not require a Hurricane Protective Device.

- 5. Wood bucks by others, and must be properly anchored to transfer loads to the existing structure. Wood bucks must be Southern Pine #2, with specific Gravity G equal or greater than 0.55.
- 6. Anchors for fastening door subframe to existing structure must be as indicated on sheet 3.
- 7. All welding to conform to the 2004 American welding Society AWS D1.3 and AWS D1.9. Regulations. Use certified welders.
- 8. All screws used for assembly connections (metal to metal) to be stainless steel 304 or 316 series or corrosion resistant coated carbon steel as per DIN 50018 with 50 ksi minimum yield strength and 90 ksi tensile strength.
- 9. Remaining components for this door system shall be as indicated on Bill of Materials on sheet 2 of this drawing.
- 10. Sealing of door components shall be as follows:

Sealant:

Frame: The interior and exterior perimeter joints and all frame connections shall be sealed with silicone sealant. The two sheet metal 45° angle shaped sections at the corner key shall be sealed to each other and to the sheet metal fabricated corner section with silicone sealant. The two steel sections at the sill shall be sealed with silicone sealant. Hinges shall be also sealed to hinge jamb with silicone sealant.

Sub-frame: The interior and exterior perimeter joints and all sub-frame connections shall be sealed with silicone sealant. Sub-frame shall be also sealed to the frame with silicone sealant around the exterior perimeter. Sub-frame shall be sealed to the wood buck using silicone sealant.

Door: The interior and exterior perimeter joints and all door connections to the main casing at the top rail, bottom rail and stiles shall be sealed with silicone sealant. Hinges shall also be sealed to hinge stile with silicone sealant. The plywood panel on exterior side of door shall be sealed around perimeter of the top rail, bottom rail and stiles with silicone sealant. The interior and exterior perimeter joints and all frame connections were sealed with silicone sealant. The sill flashing was sealed to the door panel with silicone sealant.

- 11. Frame and Sub-frame Material: Hot rolled steel DD12 Reference EN 10111 with Tensile Strength = 55,900 psi; Yield Strength at 0.2% = 52,400 psi; Ultimate Elongation 24.5%.
- 12. Door Material: Hot rolled zinc plated DX51 + Z100 (275 G/M2 0.6 Oz/Ft2) Reference EN 10142 + A1-97 with Tensile Strength = 54300 psi, Yield Strength at 49,600 psi; Ultimate Elongation = 23%.
- 13. ASTM Designation for Steel: Equivalent to ASTM A 653 CQ Grade 50 at frame and ASTM A 653 CO Grade 50 at door.
- 14. Galvanizing type: G60
- 15. Decorative Wood Clad Panels: 0.250 (1/4") thick plywood, oak, pine, mahogany, Douglas fir with 10-12% maximum moisture content, painted with minimum of two (2) coats of water based varnishes, protective impregnators and coatings for outdoor installations.
- 16. Door's manufacturer label shall be placed on the exposed surface of door's frame or sub-frame. One Label shall be placed for every door. Label shall read as follows:

Master Security Doors, Inc. Deerfield Beach, Fl Miami Dade County Product Control Approved.

17.

- a. This P.A.D. prepared by this engineer is generic and does not provide information for a specific project; i.e., where the site conditions deviate from the P.A.D.
- b. Contractor to be responsible for the selection, purchase and installation, including life safety of this product, based on this P.A.D., provide he/she does not deviate from the conditions detailed on this document. Construction safety at site is the contractor's responsibility.
- c. This P.A.D. will be considered invalid if altered by any means.
- d. This P.A.D. shall bear the date and original seal and signature of the professional engineer of record that prepared it.

WALTER A. TILLIT JR., P.E. STRUCTURAL ENGINEER FL. LIC.NO. 44167

Approved as complying with the Florida Buiding Code Date (2/23/06



MASTER SECURITY DOORS, INC 702 SOUTH MILITARY TRAIL DEERFIELD BEACH, FL 33442 TELEPHONE: 561-499-7558 FAX: 561-499-7558

EX3 USA INSWING DOOR LARGE MISSILE IMPACT RESISTANT ELEVATION NONE DRAWN BY: KP DRAWING: SCALE:

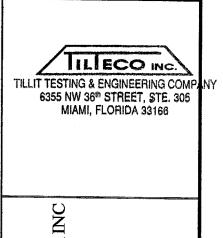
MODEL:

DATE DWN: 11/10/05

05-371 DRAWING N° SHEET 1 OF 11

BILL OF MATERIALS

ITEM #	DESCRIPTION	MATERIAL	RTY	COMMENTS	WALTER A. TILLIT JR., P.
1	HANDLE SET W/DEAD BOLT	MISC.			STRUCTURAL ENGINEER
2	EXTERIOR PANEL (SEE NOTE 15)	0.250 THK. WOOD G >= 0.55	1	ATTACLE	The Harden
3	INTERIOR PANEL (SEE NOTE 15)	0.250 THK. WOOD G >= 0.55	1	ATTACHED TO ITEM 11 WITH LIQUID NAIL GLUE	
4	FRAME JAMBS, HEAD	HR STL W/ A52 PVC FILM	3	ATTACHED TO ITEM 11 WITH LIQUID NAIL GLUE	
5_	FRAME CORNER KEY	GALV. STEEL	2	DEFEN TO CHEST O	9-3-3
6	HINGE ASSEMBLY	STEEL	3	REFER TO SHEET 8 REFER TO SHEET 10	
7	ROCKWOOL INSULATION	FIBERGLASS		PANEL CAVITY	1/12/05
8	REINF (MULTI-POINT LOCK HOUSING)	STEEL	1	AT LOCK STILE	
9	9/16" X 1/8" THK OPEN CELL FOAM	EPS			
10	PANEL REINF (HINGE STILE)	STEEL	1	W/ADHESIVE BACKING AND GLUED TO COMPR AT HINGE STILE	ESSION GASKET
11	PANEL TOP, BOTTOM & STILE RAILS	HRSTLW/A52PVCFILM	4	*	
12	#5 X 1/2" PPHSMS	STEEL	19	PANEL ASS'Y SCREW	
13	CISA CYLINDER ASSEMBLY LOCK	STEEL	1	REFER TO SHEET 9	
14	BACKING TOBAR	GALV. STEEL	2	*	
15	TOP FRAME SILL	HR STL W/ A52 PVC FILM	1	REFER TO SHEET 6	
16	REAR PANEL PLATE	HOT ROLLED STEEL	1	0.059" THK, SPOT WELDED TO ITEM 8 IN THE LOCK STILE WITH TWO ROWS OF SPOT WELDS, 4" APART, FIRST ROW AT 5/8" FROM LOCK STILE. EACH ROW WITH (8) WELDS, LOCATED (1) AT 1 1/2" FROM TOP RAIL, BALANCE AT 13 1/8", 17 1/4", 16", 3 3/4", 11", 10 3/4", 16" AND ALSO SPOT WELDED TO ITEM 10 IN THE HINGE STILE WITH ONE ROW OF (6) SPOT WELDS AT 2 1/2" FROM HINGE STILE, AND AT 2 1/2" FROM TOP RAIL, WITH BALANCE AT 14 1/2", 17", 17 7/8", 18" AND 19 1/2".	
<i>17</i>	FRONT PANEL FORMED PLATE	HOT ROLLED STEEL	1	0.059" THK, WELDED TO THE STEEL FORMED SECTION AROUND THE ENTIRE PERIMETER ON INTERIOR AND EXTERIOR SIDE, (20) WELDS AT EACH STILE, LOCATED AT (1) AT 1/1/8" FROM TOP RAIL, THEN (19) WELDS AT 4 3/4" O-C. (8) WELDS AT TOP AND BOTTOM RAIL, EACH LOCATED (1) AT 1" FROM LOCK STILE, THEN (7) AT 5" O-C.	
18	SUBFRAME HEAD	HOT ROLLED STEEL	1	REFER TO DETAIL 18, SHEET 7	
19	SUBFRAME JAMBS	HOT ROLLED STEEL		REFER TO DETAIL 19, SHEET 7	
20	LOWER FRAME SILL	HR STL W/ A52 PVC FILM	1	REFER TO DETAIL 20, SHEET 7	
21	SUBFRAME CORNER KEY	GALV. STEEL	2		
22	FRAME GASKET	VINYL	l l	REFER TO DETAIL 21, SHEET 7 AND DETAIL 5, S REFER TO DETAIL 22, SHEET 11	HEET 8
23	COMPRESSION GASKET	VINYL		REFER TO DETAIL 23, SHEET 11	
24	BLOT W/THREADED SLEEVE	STEEL	5	REF DET 24, SHEET 6 AND REF DET 28, SHEET; 13/8" WIDE X 1 1/8" HIGH CUT OUTS COVERED W COVER (5) AT HINGEJAMB	F. LOCATED AT VITH VINYL
25	RETENTION CLIP HOUSING	GALV STEEL	10	5 PER JAMB. SEE LOCATIONS ON SHEET 3. REF.	DET 25 SHEET 11
26	RETENTION CLIP	GALV. STEEL	,	5 PER JAMB. SEE LOCATIONS ON SHEET 3. REF. DET 26, SHEET 11	
27	M8 X 30MM ALLEN HEAD BOLT	STEEL		SEE SHEET 3 FOR LOCATIONS	
28	BLOT KEEPER	PLASTIC		REF DET 28, SHEET F. USE 5 AT HINGE JAMB AT	TITEM 24
29	SILLSWEEP	STEEL W/A52 PVC FILM		REFER TO DETAIL 29, SHEET 7	1 (1) (1)*(27,
30	SILL SWEEP END GASKET	VINYL		REFER TO DETAIL 30, SHEET 7	
31	SILL SWEEP FASTENER	STEEL		REFER TO SHEET 4	
32	5/8" X 0.090" THK OPEN CELL FOAM	EPS		AT SILL SWEEP, BETWEEN SILL SWEEP AND DO	OOR PANEL
33	CHANNEL COVER (0.227" X 0.390" X 0.38 THK)	PLASTIC		REFER TO DETAIL *, SHEET *	



MASTER SECURITY DOORS, INC 702 SOUTH MILITARY TRAIL DEERFIELD BEACH, FL 33442 TELEPHONE: 561-499-7558 FAX: 561-499-7558

MODEL: EX3 USA
INSWING DOOR
LARGE MISSILE
IMPACT RESISTANT
DRAWING: ELEVATION
SCALE: NONE
DRAWN BY: KP
DATE DWN: 11/10/05

05-371 DRAWING N° SHEET 2 OF 11

